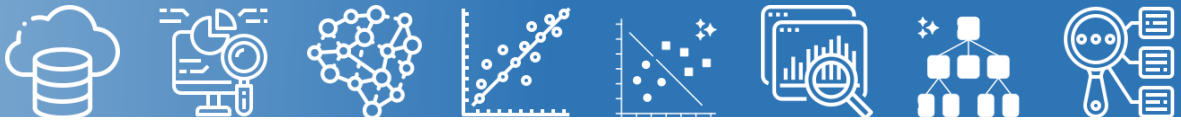
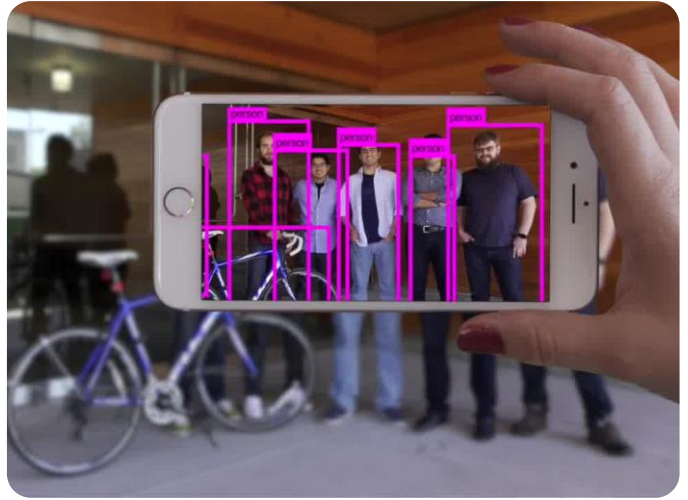


IOT FOR AI DEVELOPERS AND DATA SCIENTISTS



IoT systems bring together real time data from multiple sensors attached to different portions of a process or equipment. This high fidelity data set enables data scientists and AI engineers to create advanced mathematical models to accurately represent holistic interactions within the internal components. While the models can themselves be trained on a compute intensive server grade environment during development, they can be deployed on the relatively modest hardware specifications of IoT devices. For example the US startup



Xnor.ai (acquired by Apple in 2020) specializes in low power, edge based AI tools enabling image recognition on the camera hardware directly. Such innovations have the effect of converting a camera into a people detector without requiring the network bandwidth to transfer the image



stream between the edge device and the backend system. Other innovations like deep learning chipsets (from Intel, Qualcomm, Nvidia) are pushing the frontier of hardware capabilities on the edge devices.

Almost all preventive IoT systems requires the real time data to be clustered or classified so as to activate rule engines running the business logic. In predictive applications the models are created with the objective of continuous unsupervised learning so that the artificial intelligence algorithms can create forecasts with a high degree of confidence.

Capsule Labs is founded by IoT industry veterans and offers foundational IoT projects to develop a better understanding of IoT solution. With our camera kit you can create projects with smart image processing capabilities.